

FIG. 1

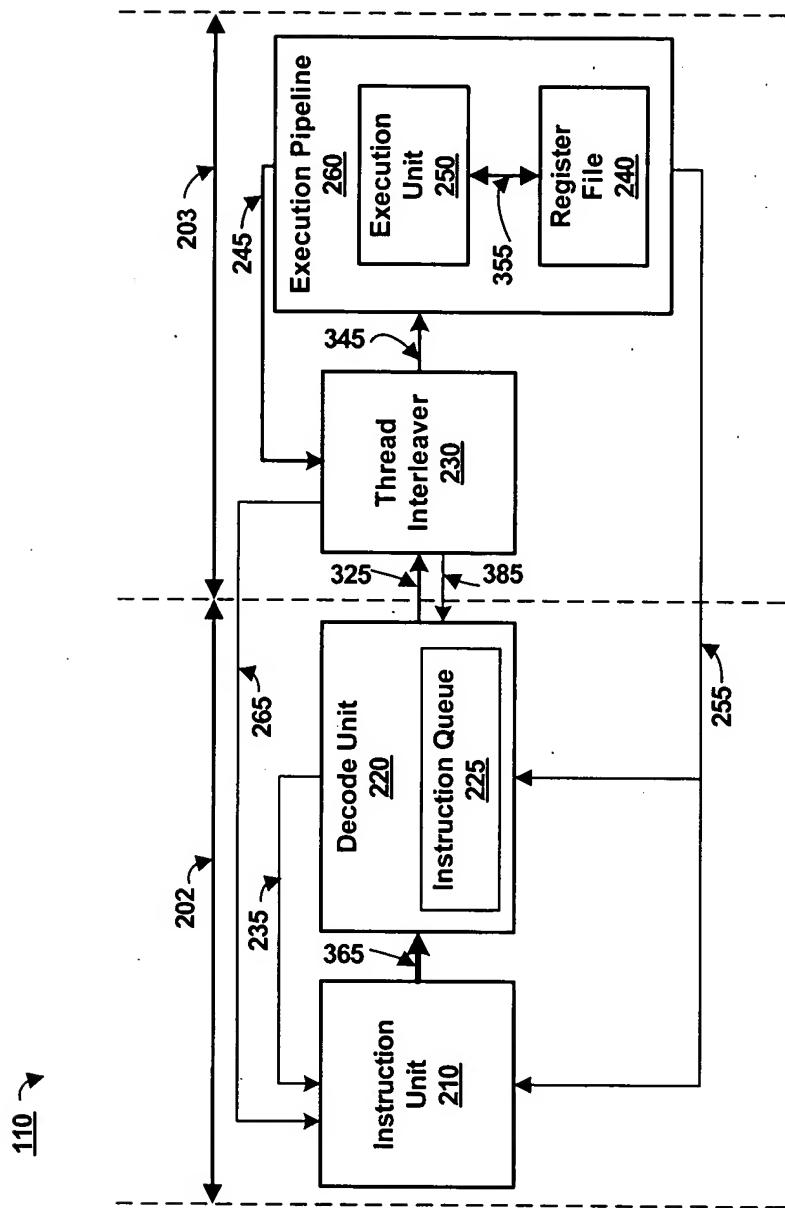


FIG. 2

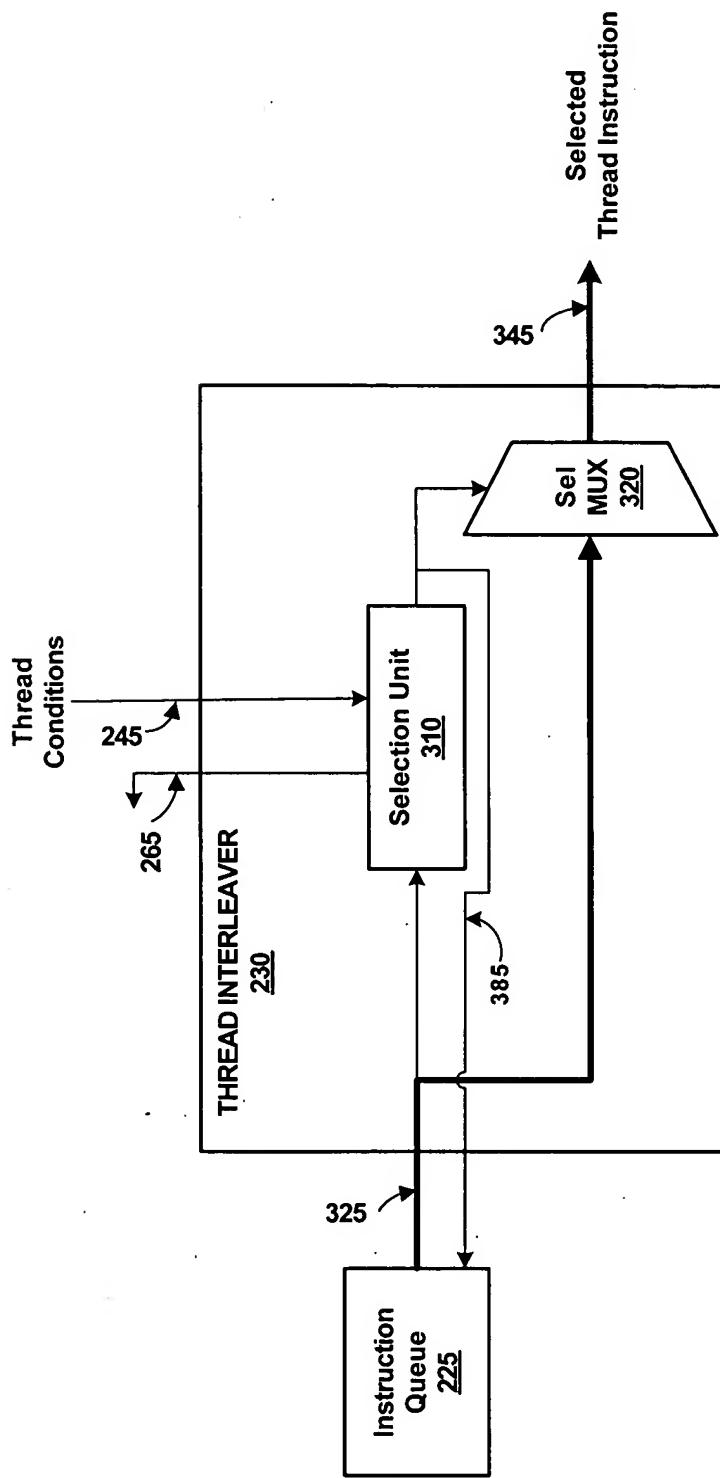


FIG. 3

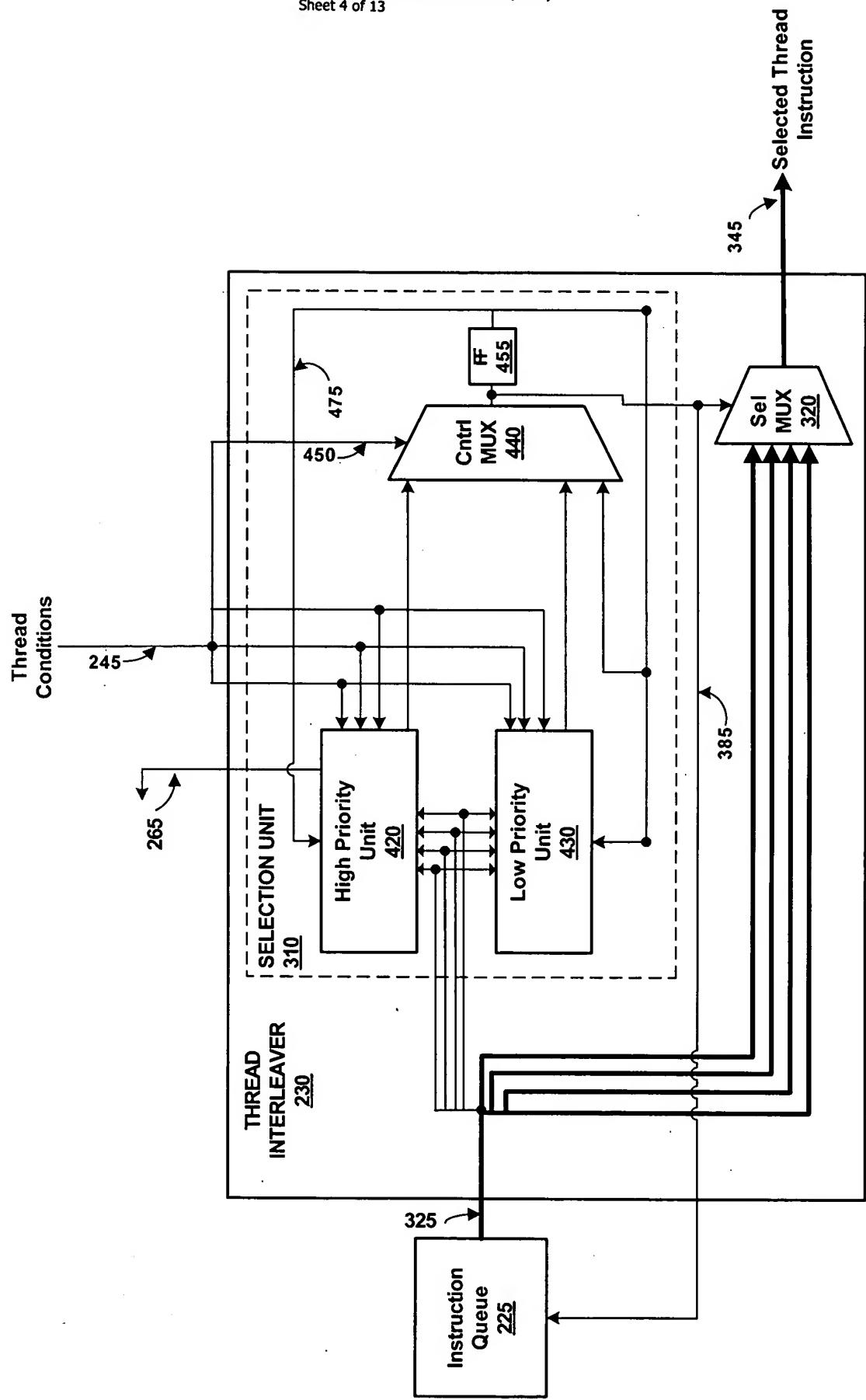


FIG. 4

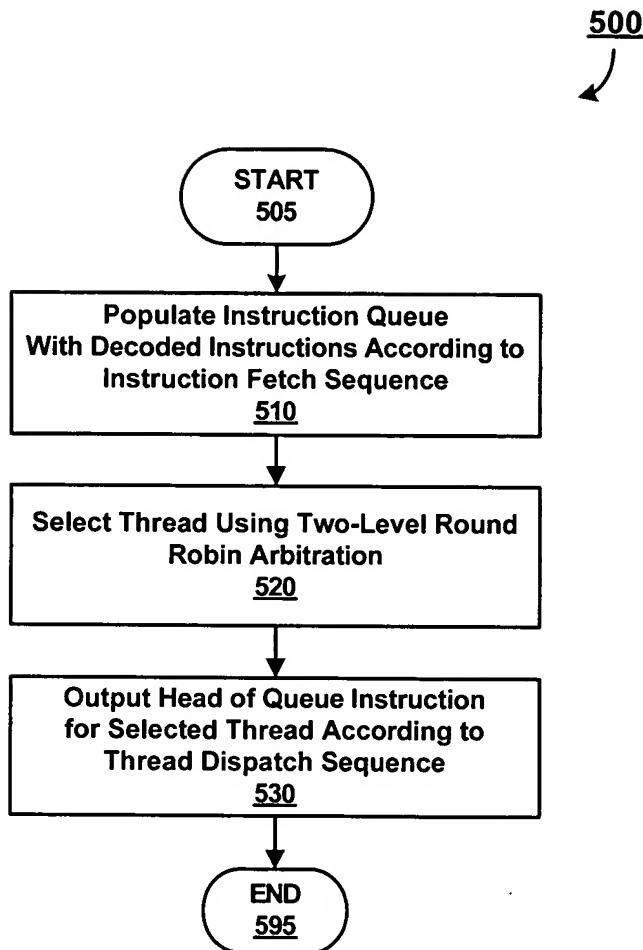


FIG. 5A

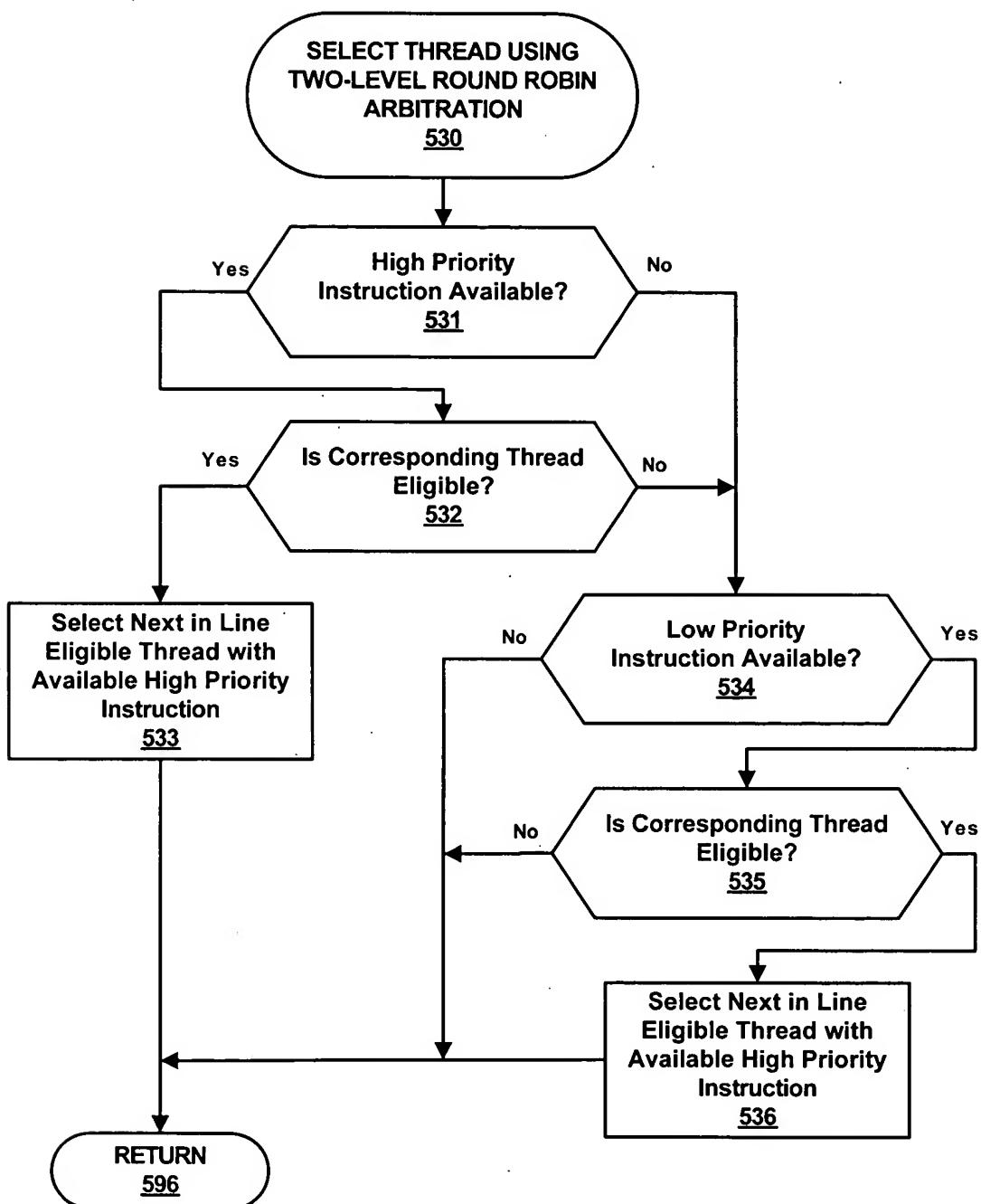


FIG. 5B

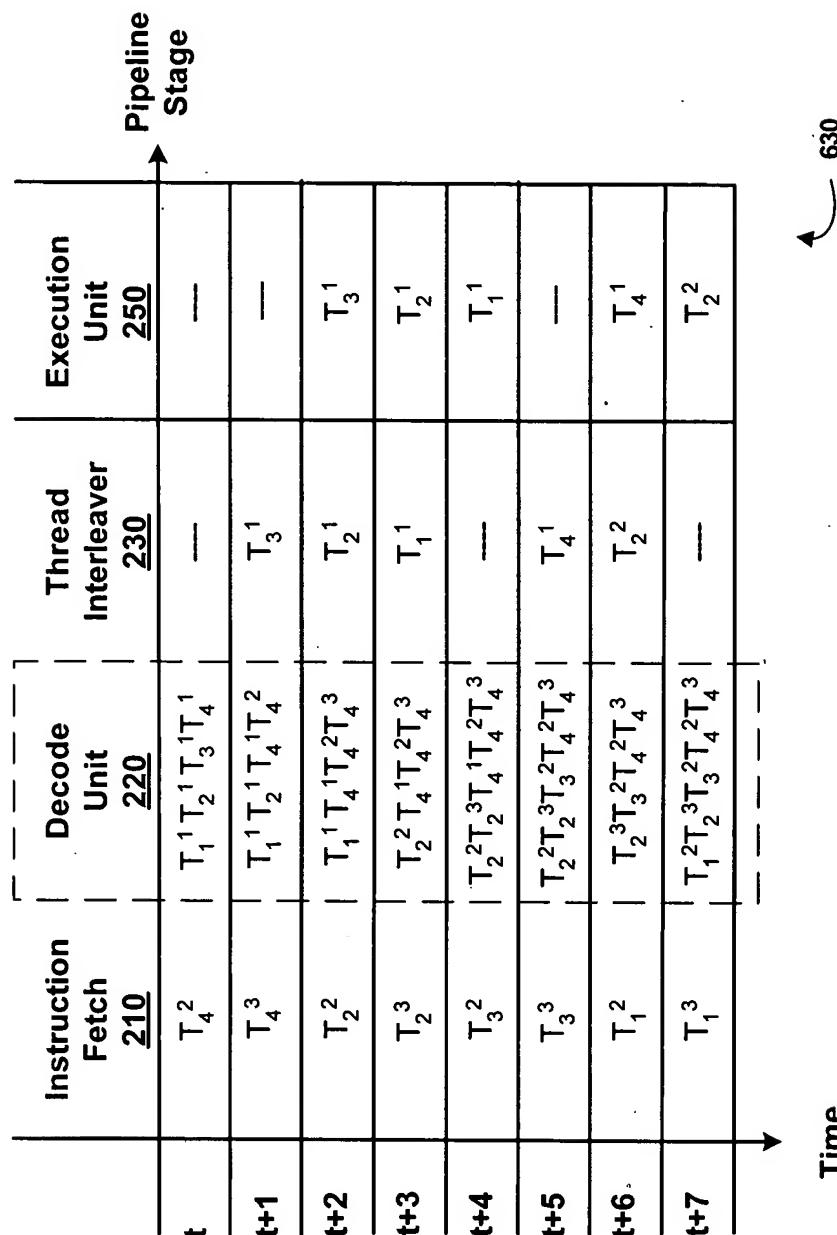
[Priority / Availability / Eligibility]  
610

	$T_1$	$T_2$	$T_3$	$T_4$	Previous Selection
$t$	[0/1/1]	[0/0/0]	[1/1/1]	[0/1/0]	—
$t+1$	[0/1/1]	[1/1/1]	[1/0/1]	[1/1/0]	$T_3^1$
$t+2$	[0/1/1]	[0/0/1]	[1/0/1]	[1/1/0]	$T_2^1$
$t+3$ (global stall)	[0/0/0]	[0/1/0]	[1/0/1]	[1/1/1]	$T_1^1$
$t+4$	[0/0/0]	[1/1/0]	[1/0/1]	[1/1/1]	—
$t+5$	[0/0/0]	[1/1/1]	[1/1/1]	[0/1/1]	$T_4^1$
$t+6$	[0/0/0]	[1/1/0]	[1/1/1]	[0/1/0]	$T_2^2$

Time →

620

FIG. 6A



**FIG. 6B**

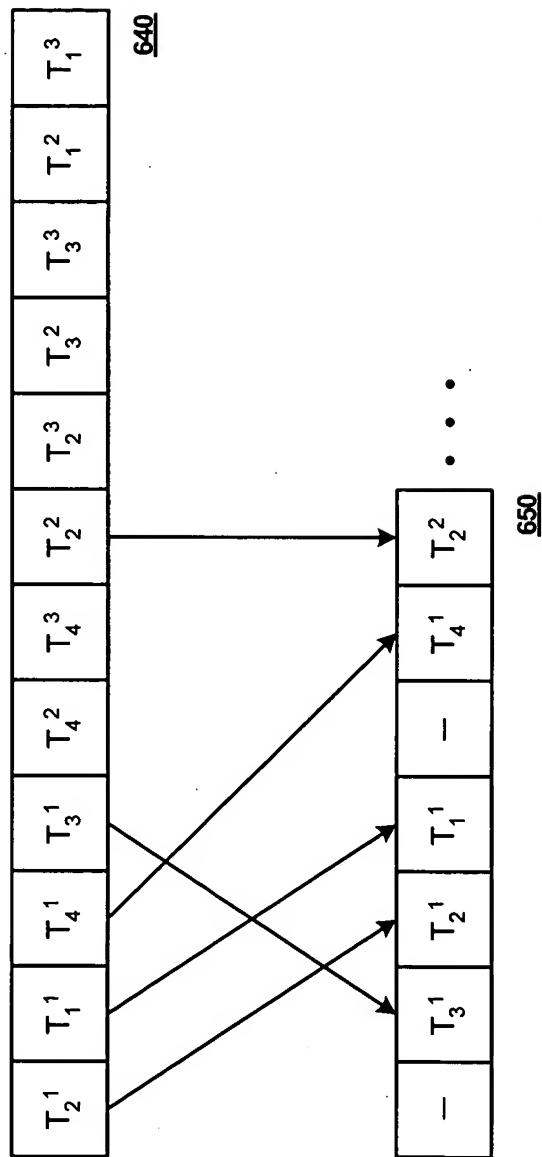


FIG. 6C

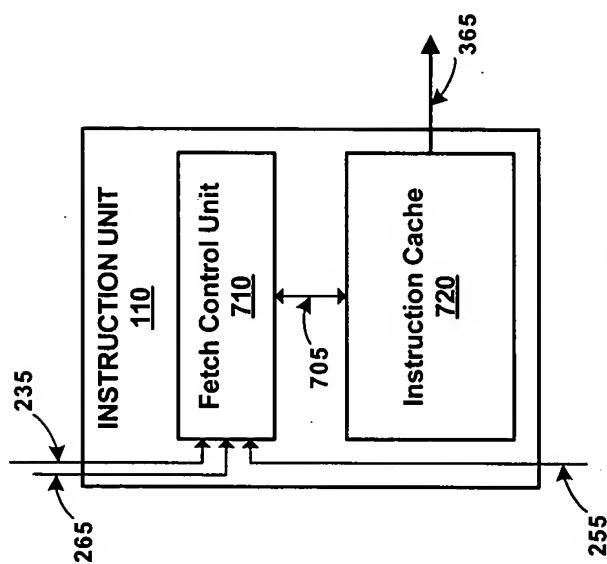


FIG. 7

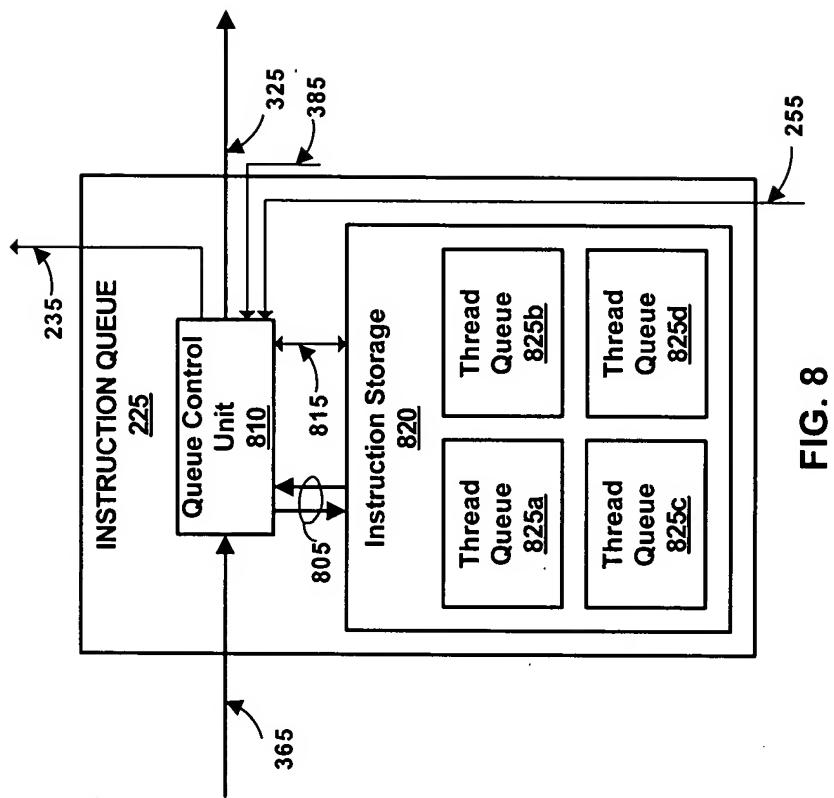


FIG. 8

900

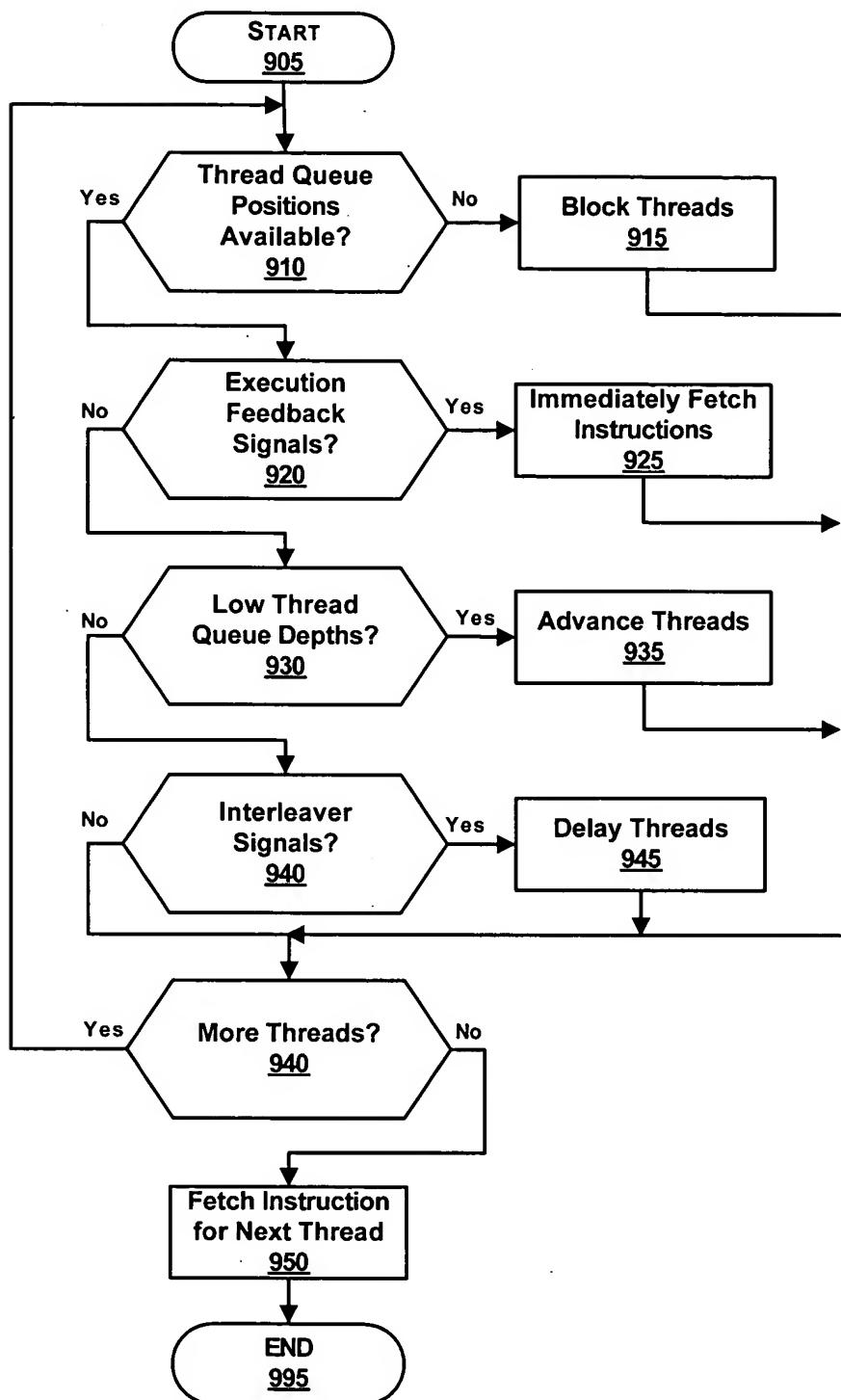


FIG. 9

[ No Queue Position Available / Branch Misprediction / Low Queue Depth / Ineligible for Execution ]  
1010

	$T_1$	$T_2$	$T_3$	$T_4$	Fetch Control Unit <u>710</u>
$t$	[0/0/0/0]	[0/0/0/0]	[0/0/0/0]	[0/1/0/0]	Immediately Fetch for $T_4$
$t+1$	[1/0/0/0]	[0/0/0/0]	[0/0/0/0]	[0/0/0/0]	Block Fetch for $T_1$
$t+2$	[0/0/0/0]	[0/0/1/0]	[0/0/0/0]	[0/0/0/0]	Advance Fetch for $T_2$
$t+3$	[0/0/0/0]	[0/0/0/0]	[0/0/0/0]	[0/0/0/0]	No Input for Response
$t+4$	[0/0/0/0]	[0/0/0/0]	[0/1/0/0]	[0/1/0/0]	Immediately Fetch for $T_3$

Time  


FIG. 10A

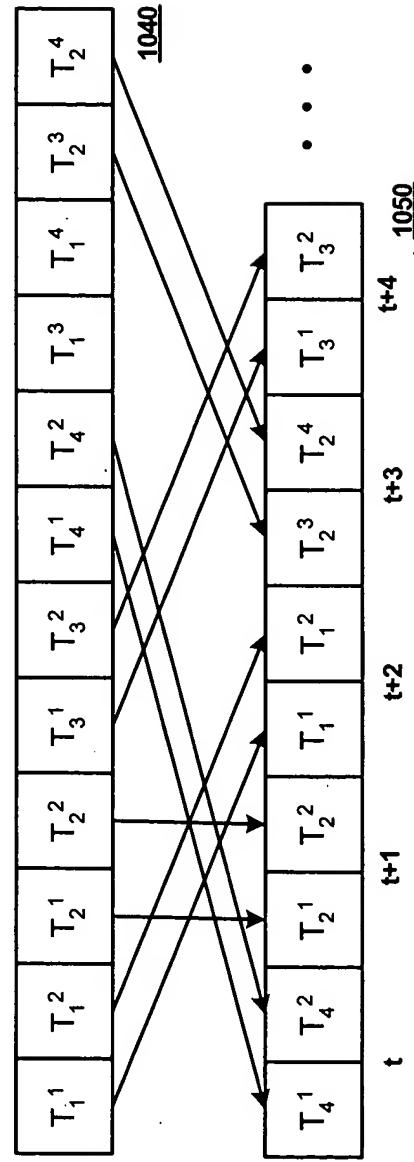


FIG. 10B